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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/960,626	09/21/2001	Michael Merchant	M93.12-0238	4288

7590 10/01/2004

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EXAMINER

VOELTZ, EMANUEL T

ART UNIT	PAPER NUMBER
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2121

DATE MAILED: 10/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/960,626

Applicant(s)

MERCHANT ET AL.

Examiner

Emanuel T. Voeltz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on August 13, 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-27 is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_



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## Examiner's Detailed Office Action

The indicated allowability of claims 1-9 is withdrawn in view of a subsequent review under 35 U.S.C. 101, non-statutory subject matter.

A rejection to claims 1-9 is outlined below.

Claims 1-27 have been examined.

### Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-9 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claims, as presently claimed and best understood were considered in light of the new "Examination Guidelines for Computer-Related Inventions" and were found to be non-statutory.

Discussion of the analysis of the claims under the guidelines follows

As per claims 1-9, the invention, as defined by the claims and as best understood merely manipulate an abstract idea or perform a purely mathematical algorithm without any limitation to a practical application in the technological arts. The invention is implemented on a computer; therefore, the invention is directed to the technological arts. However, the claimed invention merely recites a mathematical formula that could be envisioned using paper and pencil. The

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invention does not require physical acts to be performed outside the computer independent of and following the steps to be performed by a programmed computer, where those acts involve the manipulation of tangible physical objects and result in the object having a different physical attribute or structure. See *Diamond v. Diehr*, 450 US at 187, 209 USPQ at 8. The steps of “applying an input to a first model...” and “combining an output from the first model...” do not impose independent limitations on the scope of the claim beyond those required by the mathematical operation and abstract limitations because the “applying an input to a first model...” and “combining an output from the first model...” are not actual measured values of physical phenomena. *In re Galnovatch*, 595 F.2d at 41 n.7, 201 USPQ at 145 n.7; *In re Sarker*, 588 F.2d at 1331, 200 USPQ at 135. The steps of “applying” and “combining” have no direct effect on the physical world outside the computer. Thus, the claimed invention merely inputs data into the system and performs a mathematical algorithm without any limitation to a practical application as a result of the algorithm or outcome and is therefore deemed to be non-statutory

### Allowable Subject Matter

Claims 10-27 are allowable over the prior art of record.

### Correspondence Information

Any inquiries concerning this communication or earlier communications from the examiner should be directed to **Emanuel Todd Voeltz** who may be reached via telephone at **(703) 305-4563**. The examiner can normally be reached Monday through Friday between the hours of 8:00 a.m. and 4:00 p.m. eastern standard time.

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If you need to send an Official facsimile transmission, please send it to (703) 872-9306. If you would like to send a Non-Official (draft) facsimile transmission the fax is (703) 746-5104. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, **Anthony Knight**, may be reached at (703) 308-3179.

***SPECIAL NOTE (After October 14, 2004)***


Any inquiries concerning this communication or earlier communications from the examiner should be directed to **Emanuel Todd Voeltz** who may be reached via telephone at (571) 272-3692. The examiner can normally be reached Monday through Friday between the hours of 8:00 a.m. and 4:00 p.m. eastern standard time.

If you need to send an Official facsimile transmission, please send it to (703) 872-9306. If you would like to send a Non-Official (draft) facsimile transmission the fax is (703) 746-5104. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, **Anthony Knight**, may be reached at (571) 272-3687.

Any response to this office action should be mailed too: **Director of Patents and Trademarks**  
**Washington, D.C. 20231.**

Moreover, hand-delivered responses should be delivered to the Receptionist, located on the  
**fourth floor of Crystal Park 11, 2121 Crystal Drive Arlington, Virginia.**

*Emanuel Todd Voeltz*  
Primary Patent Examiner  
Art Unit 2121  
United States Department of Commerce  
Patent & Trademark Office

  
**EMANUEL TODD VOELTZ**  
**PRIMARY EXAMINER**